June 11, 2001

IN RE: DOCKET NO. 2001-65-C – BellSouth - UNE

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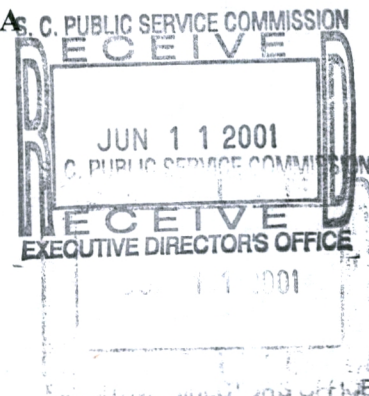Research (1)

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BELLSOUTH TELECOMMUNICATIONS INC.

BEFORE THE

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2001-65-C

REBUTTAL TESTIMONY OF

DR. RANDALL S. BILLINGSLEY, CFA

JUNE 11, 2001

I. INTRODUCTION

Q. **Please state your name, occupation, and business address.**

A. My name is Randall S. Billingsley. I am a finance professor at Virginia Polytechnic Institute and State University. I also act as a financial consultant in the areas of cost of capital analysis, financial security analysis, and valuation. My business address is: Department of Finance, Pamplin College of Business, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061-0221.

This rebuttal testimony presents my independent professional opinions and is not presented by me as a representative of Virginia Polytechnic Institute and State University.

Q. **Have you previously submitted direct testimony in this proceeding on behalf of BellSouth Telecommunications, Inc. (BST)?**

A. Yes.

1   Q.   **Before you begin your testimony, please distinguish between your references to BST**

2   **and BellSouth.**

3

4   A.   It is important to note that BST is a wholly-owned subsidiary of BellSouth Corporation

5   ("BellSouth"), its parent company. BST is the historically regulated wireline telephone

6   company that is the incumbent local exchange company (ILEC) for the purposes of the

7   obligations imposed by the Telecommunications Act of 1996, including the provision of

8   unbundled network elements (UNEs) at cost-based rates. BellSouth, the parent company,

9   in addition to owning BST, also has many and diverse other interests in

10   telecommunications, which include both domestic and international wireless operations.

11

12   **II. PURPOSE OF REBUTTAL TESTIMONY AND SUMMARY OF**

13   **CONCLUSIONS**

14   **A. PURPOSE OF REBUTTAL TESTIMONY**

15

16   Q.   **What is the purpose of your rebuttal testimony in this proceeding?**

17   A.   My purpose is to rebut the direct testimony of Mr. Don J. Wood filing on behalf of New

18   South Communications, NuVox Communications, Broadslate Networks, ITC^DeltaCom

19   Communications, and KMC Telecom. He erroneously estimates the average overall cost of

20   equity capital for BST to be about 8.5%, the cost of debt to be 7.2%, and BST's overall

21   average cost of capital to be in the range of only 7.79% to 8.23%.

22

23   I also considered the direct testimony filed by Dr. James E. Spearman of the Research

24   Department of the Public Service Commission of South Carolina (Commission) in this

25   proceeding. I observe that he, like myself, finds BST's use of an overall cost of capital of

1   11.25% to be appropriate (see page 18, lines 18 – 19).

2

3   Finally, I update my direct testimony that was submitted to the Commission on February

4   16, 2001, in this proceeding. Thus, I estimate BST's forward-looking costs of capital in

5   light of updated capital market and company data and determine the reasonableness of

6   using an overall cost of capital of 11.25% in BST's UNE cost studies in the state of South

7   Carolina.

8

9   Below I summarize my rebuttal of Mr. Wood's direct testimony and the results of my

10   updated cost of capital analysis.

11

12   **B. SUMMARY OF REBUTTAL OF MR. DON J. WOOD'S TESTIMONY ON**

13   **BEHALF OF NEW SOUTH COMMUNICATIONS, NUVOX**

14   **COMMUNICATIONS, BROADSLATE NETWORKS, ITC^DELTACOM**

15   **COMMUNICATIONS, AND KMC TELECOM**

16

17   Q.   **What issues does your rebuttal focus on in Mr. Wood's direct testimony concerning**

18   **BST's capital costs?**

19   A.   My rebuttal explains the errors and inconsistencies in Mr. Wood's discounted cash flow

20   (DCF) and capital asset pricing model (CAPM) analyses of BST's costs of equity capital,

21   his cost of debt estimation, and his recommended capital structure and resulting overall cost

22   of capital. His errors in estimating BST's cost of equity using the DCF approach include: 1)

23   use of a highly subjective three-stage model that is not representative of the investor's

24   perspective; 2) use of growth rate forecasts that do not reflect consensus investment

25   community expectations; 3) inappropriate and unsupported reliance on BellSouth (parent

3

1   company), other regional Bell holding companies (RBHCs), and selected independent

2   telephone companies as comparable in risk to BST (regulated subsidiary); 4) failure to

3   adjust for flotation costs, and 5) failure to use the appropriate form of the DCF model that

4   recognizes the quarterly payment of dividends.

5

6   Mr. Wood's errors in calculating BST's cost of equity using the CAPM include: 1)

7   incorrect reliance on historical rather than prospective beta coefficients, and 2) use of an

8   unrealistically low market risk premium. These errors are one reason his CAPM estimate of

9   BST's cost of equity is so seriously underestimated.

10

11 My rebuttal shows that Mr. Wood's cost of debt analysis is flawed by his reliance on debt

12 that was not issued to finance telephone network assets. Moreover, Mr. Wood places too

13 much reliance on book values in determining his recommended capital structure.

14

15 **C. SUMMARY OF UPDATED BST COST OF CAPITAL ANALYSIS**

16

17 Q. **Please describe the approaches that you use to update your estimates of BST's cost of**

18   **equity capital and summarize your conclusions.**

19 A. I use the same approaches that were used in my previously filed direct testimony in this

20   proceeding. The updated cost of equity for BST is between 14.86% and 15.60% using the

21   comparable firm group DCF model approach. The CAPM approach indicates that BST's

22   updated cost of equity capital is in the range of 13.92% to 14.40%. The risk premium

23   approach indicates that the expected return on the overall equity market, as measured by the

24   S&P 500, is currently between 14.85% and 15.12%. From these updated analyses, I

25   conclude that BST's current cost of equity capital is within the range of 13.92% to 15.60%.

1

2 Q. **What cost of debt and market value-based capital structure do you estimate for BST**

3   **using updated data?**

4 A. Using the same approaches as those in my previously filed direct testimony, I find that

5   BST's forward-looking cost of debt is about 7.79%. The average market value-based

6   capital structure for the portfolio of firms comparable in risk to BST consists of 14.79%

7   debt and 85.21% equity.

8

9 Q. **Please describe how you evaluate the reasonableness of using an overall cost of capital**

10   **of 11.25% in BST's cost studies and summarize your current findings.**

11 A. I use the same approach as that in my previously filed direct testimony in this proceeding.

12   Relying on updated estimated capital costs along with the above-noted market value-based

13   capital structure, I find that BST's overall cost of capital is between 13.01% and 14.44%.

14   Therefore, the use of an 11.25% cost of capital in BST's UNE cost studies is quite

15   conservative in light of updated capital market data.

16

17   **III. REBUTTAL OF MR. DON J. WOOD'S DIRECT TESTIMONY ON BEHALF**

18   **OF NEW SOUTH COMMUNICATIONS, NUVOX COMMUNICATIONS,**

19   **BROADSLATE NETWORKS, ITC^DELTACOM COMMUNICATIONS, AND**

20   **KMC TELECOM**

21   **A. ERRORS IN DCF COST OF EQUITY ANALYSIS**

22   **1. FAILURE TO REFLECT INVESTORS' PERSPECTIVE**

23

24 Q. **Is Mr. Wood's use of a three-stage DCF model representative of investors' valuation**

25   **perspective and is it a common approach in regulatory proceedings?**

5

1 A. No, Mr. Wood's three-stage model is complex, subjective, and uses growth rate forecasts

2 that reflect his own opinions rather than those of the investment community. Due to these

3 limitations, three-stage approaches are not commonly used in regulatory proceedings. Mr.

4 Wood's results do not provide insight into BST's current forward-looking cost of equity

5 capital.

6

7 Mr. Wood's three-stage approach makes use of firm-specific investment community

8 consensus growth rate forecasts, as measured by Institutional Brokers Estimation Service

9 (IBES), for only the first stage (five years) of his analysis. After this five-year period, he

10 assumes a second stage of about 15 years during which the growth rate falls from the initial

11 IBES growth rate to a projected growth rate for the overall U.S. economy by the end of the

12 20th year. After that time, Mr. Wood assumes that the growth rate remains at that projected

13 rate for the economy indefinitely (Direct Testimony, p. 80, line 15 – p. 81, line 2).

14

15 Mr. Wood's analysis misses the mark in the current proceeding. The goal here is to

16 estimate BST's cost of meeting their equity investors' return requirements in market terms.

17 Thus, the analysis should reflect the investment analysis process and expectations of

18 investors. Mr. Wood's analysis of BST's cost of equity departs from investors' perspective

19 by substituting his expectations for those of investors for two out of the three stages in his

20 analysis.

21

22 **Q. How does Mr. Wood substitute his own growth rate forecasts for the consensus**

23 **estimates available in the market?**

24 A. Mr. Wood only use consensus growth rate estimates for the first five years of his analysis

25 and then speculates that it is appropriate to apply a long-term growth rate forecast for the

1 overall U.S. economy to all of the firms in his analysis after twenty years. The alleged

2 benefits of his three-stage model over a single-stage model are offset by the need to make

3 so many subjective estimates that are not supported by verifiable market data and consensus

4 investor expectations. For example, he offers no evidence to support his use of a second

5 stage that is 15 years long. Why not 10, 25, or 30 years? His three-stage model is

6 unnecessarily subjective, unrepresentative of investors' growth rate expectations, contrary

7 to investors' realistic concerns, and particularly useless in the dynamic telecommunications

8 industry. While Mr. Wood's model is admittedly inventive, it is not informative concerning

9 BST's market-based capital costs.

10

11 Q. **Is there any evidence on the limitations of using the three-stage version of the DCF**

12 **model?**

13 A. Yes. In comparing the three-stage model to the other versions of the DCF model, a noted

14 valuation scholar, Professor Aswath Damodaran, observes that:

15 ... it requires a much larger number of inputs: year-specific payout ratios, growth

16 rates, and betas. For firms in which there is substantial noise in the estimation

17 process, the errors in these inputs can overwhelm any benefits that accrue from the

18 additional flexibility in the model (*Damodaran on Valuation*, John Wiley & Sons,

19 1994, pp. 118 -119).

20

21 Professor Damodaran's concern over the effect of "substantial noise" is particularly

22 relevant to Mr. Wood's analysis. He applies a three-stage DCF model to RBHCs and

23 selected independent telephone holding companies. The dramatic effects of deregulation,

24 increasing competition, the implementation of the Telecommunications Act of 1996, and

25 industry consolidation certainly introduce much noise into the estimation of such firms'

7

1   equity costs. Thus, Mr. Wood's DCF model is particularly inappropriate for estimating

2   BST's cost of equity. My methodological approach is more reliable because it uses a group

3   of firms that is demonstrably comparable in risk to BST. My group of firms, which captures

4   comparable firms across industry lines, is not seriously affected by such "noise." Further,

5   my approach does not require the highly subjective inputs that Mr. Wood's three-stage

6   model does.

7

8   **2. INCORRECT RELIANCE ON BELLSOUTH, OTHER RBHCS,**

9   **AND SELECTED INDEPENDENT TELEPHONE COMPANIES AS**

10   **COMPARABLE IN RISK TO BST**

11

12 Q. **What justification does Mr. Wood give for applying the DCF and the CAPM**

13   **approaches to BellSouth, other RBHCs, and selected independent telephone**

14   **companies as firms comparable in risk to BST?**

15 A.   Mr. Wood offers no justification for the use of the supposedly comparable firms listed on

16   page 1 of Exhibit DJW-9. He only vaguely observes in passing that "[t]his aggregate of the

17   comparable companies adjusts for the variable risks" (Direct Testimony, p. 81, line 12).

18   Thus, Mr. Wood *assumes* that BST is comparable in risk to BellSouth, other RBHCs, and

19   selected independent telephone companies. He does not demonstrate comparability. Mr.

20   Wood conducts no systematic, empirical analysis using objective screening criteria to

21   identify firms comparable in risk to BST. Thus, there is no reason to believe that there is a

22   predictable relationship between the capital costs of Mr. Wood's arbitrarily chosen group of

23   allegedly comparable firms and BST's capital costs.

24

25   In contrast to Mr. Wood, I identify comparable firms by measuring risk and statistically

8

1   determining risk comparability. My analysis shows that neither the RBHCs, as a group, nor

2   the independent telephone companies are comparable in risk to BST.

3

4   **3. FAILURE TO ADJUST FOR FLOTATION COSTS**

5

6   Q.   **Do you agree with Mr. Wood's decision to ignore the impact of flotation costs in**

7   **estimating the costs of equity capital for BST?**

8   A.   No, I do not agree with his decision. As elaborated on in Billingsley Exhibit No RSB-2 in

9   my Direct Testimony, Mr. Wood's failure to adjust for flotation costs biases his cost of

10   equity estimates downward.

11

12   **4. FAILURE TO ADJUST FOR QUARTERLY DIVIDEND**

13   **PAYMENTS**

14

15   Q.   **Is Mr. Wood's use of the annual form of the DCF model consistent with the investor's**

16   **perspective on valuing equity securities?**

17   A.   No. Mr. Wood uses the annual form of the DCF model even though all of the members of

18   his sample of supposedly comparable firms pay dividends on a quarterly basis. The annual

19   form of the DCF model does not accurately portray the investor's perspective, and

20   consequently, significantly underestimates BST's cost of equity capital.

21

22   Consider the example of how the returns on an Individual Retirement Account (IRA) differ

23   when compounded quarterly rather than annually. The opportunity to earn a return quarterly

24   rather than annually has a significant effect on the value of an IRA to an investor. The same

25   economic principle is at work when investors value the opportunity to receive dividends on

9

1   a stock quarterly rather than annually.

2

3   Suppose that you invest $2,000 in an IRA account today and expect to earn 8% per year. If

4   your money earns the 8% compounded annually, you will have about $13,697 before taxes

5   in 25 years. Alternatively, if your money earns the 8% compounded quarterly, you will have

6   about $14,489 before taxes in 25 years. Thus, your IRA will be worth about $792 more if

7   your returns are compounded quarterly rather than annually. This $792 difference is present

8   because you earn an effective rate of about 8.24% under quarterly compounding rather than

9   just 8% annually. Obviously, investors would prefer to have $792 more in 25 years and

10   would consequently prefer that their 8% return be compounded quarterly rather than

11   annually.

12

13   When Mr. Wood fails to consider that dividends are received by investors quarterly, he

14   essentially argues that investors are indifferent to whether dividends are paid annually or

15   quarterly. Similarly, he effectively asserts that the IRA investor in the above example

16   would not care whether he or she could earn an extra $792. Yet the common sense of the

17   investor's perspective in both cases convincingly demonstrates that if quarterly

18   compounding is not considered in cost of capital analysis, the implied rate of return is

19   underestimated.

20

21   **B. ERRORS IN CAPM COST OF EQUITY ANALYSIS**

22

23   Q. **What mistakes does Mr. Wood make in estimating BST's cost of equity using the**

24   **CAPM?**

25   A. Mr. Wood relies on historical betas provided by the *Standard and Poor's Stock Report* (see

10

1   Direct Testimony, p. 82, lines 8 – 9). The CAPM is a forward-looking model of capital costs

2   that should use prospective rather than historical betas. As noted in my Direct Testimony, my

3   CAPM analysis relies on prospective betas provided by BARRA. Further, Mr. Wood uses a

4   long-term risk premium of only 3.58% (see Direct Testimony, p. 83, lines 14 - 16) while I

5   provide updated evidence below that the risk premium is at least twice that unrealistically

6   low estimate.

7

8   **C. ERRORS IN COST OF DEBT ESTIMATION**

9

10 **Q.**   **What mistakes does Mr. Wood make in estimating BST's cost of debt of BST?**

11 **A.**   Mr. Wood fails to measure the cost of debt that is relevant to determining the forward-

12   looking costs of BST providing UNEs in South Carolina. He inappropriately relies on the

13   costs of debt issued by a subsidiary of BST's holding company where the proceeds have not

14   been used to finance telephone network assets. Specifically, on page 2 of Exhibit DJW-9,

15   Mr. Wood inappropriately uses the costs of debt issued by BellSouth Capital Funding, with

16   the support of BellSouth, as proxies for BST's debt costs.

17

18   **D. ERRORS IN RECOMMENDED CAPITAL STRUCTURE**

19

20 **Q.**   **Do you agree with Mr. Wood's heavy reliance on book value capital structures?**

21 **A.**   No, I do not. Mr. Wood gives equal weight to book values and market values in producing

22   his capital structure recommendations for BST. He relies on book value capital structures

23   to determine the low end of his recommended cost of capital ranges, while market value

24   capital structures produce the high end of his ranges. The use of market values is

25   theoretically appropriate and consistent with establishing a forward-looking cost of capital

11

1   for use in evaluating the UNE cost studies in a proceeding such as this one.

2

3   As discussed in my previously filed direct testimony, market values deserve higher weight

4   because they are dynamically determined in the marketplace by investors, while book

5   values are the result of historical accounting practices. One-time accounting events that do

6   not change market values can significantly alter book values. Examples of one-time events

7   include restructuring charges, the adoption of SFAS 106 for Other Post-Employment

8   Benefits, and the discontinuance of regulatory accounting under SFAS 71. Additionally,

9   the point in time at which a company issued stock in the past can influence backward-

10   looking book values, while forward-looking market values are not affected.

11

12   Over time, market values vary from book values as investors change the stock price in

13   reaction to new information. If a new event or announcement significantly enhances or

14   detracts from shareholder value, that change is immediately translated into a market value

15   change, while there is likely to be no immediate change in book value. Mr. Wood's over-

16   reliance on book values is unrepresentative of the investor's perspective and introduces yet

17   another downward bias to his cost of capital estimates.

18

19   **E. SUMMARY OF REBUTTAL OF MR. WOOD'S COST OF CAPITAL**

20   **ESTIMATES FOR BST**

21

22 **Q.   Please summarize your evaluation of Mr. Wood's cost of equity estimates for BST.**

23 A.   Mr. Wood incorrectly estimates BST's cost of equity to be an average of about 8.5% due to

24   numerous errors in his applications of the DCF and CAPM approaches. His DCF model is

25   flawed due to: 1) failure of his subjective three-stage model to reflect investors'

12

1 perspective; 2) incorrect and unsupported reliance on BellSouth, other RBHCs, and

2 selected independent telephone companies as comparable in risk to BST; 3) failure to adjust

3 for flotation costs, and 4) failure to adjust for quarterly dividend payments. Mr. Wood's

4 CAPM cost of equity analysis for BST is also unreliable because it is based on historical

5 rather than forward-looking systematic (beta) risk estimates and an unrealistically low

6 equity market risk premium.

7

8 **F. INCORRECT AND MISLEADING COMMENTS CONCERNING**

9 **INFLATION**

10

11 Q.   **Mr. Wood claims that BST's cost calculations improperly double-count the effects of**

12 **inflation. Is he correct?**

13

14 A.   No. Mr. Wood states:

15

16   Inflation is accounted for in the BellSouth cost studies through the

17   application of inflation factors from a database that BellSouth refers to as

18   the TPI (Caldwell, pp. 28). The cost of capital used in the BellSouth cost

19   studies also accounts for the effects of inflation (this is true of the value

20   supported by BellSouth witness Billingsley as well as the value I

21   recommend in Section 6 of my testimony). As a result of how these two

22   types of data are used, inflation is double-counted in BellSouth's cost

23   study (Direct Testimony, p. 42, line 17 – p. 43, line 3).

24

25 Mr. Wood ignores that there are two distinct types of inflation that affect the cost BST will

1 incur - one to compensate investors for the use of their funds and the other to capture the

2 increase/decrease in the cost of the plant itself over time. The cost of capital compensates

3 investors for the use of their funds and this should consider general economy-wide

4 inflation effects. On the other hand, the material costs associated with equipment reflect

5 the costs BST incurs in running the business. It is unrealistic to imply that the costs BST

6 faces in purchasing plant are immune to changes in specific material prices. BST must pay

7 both for its facilities (today and in the future at future prices) and to reimburse its

8 investors. Simply put, a cost of capital adjusted for expected inflation must be matched

9 with projected cash flows that also reflect expected inflation.

10

11 The following discussion in Thomas Copeland and J. Fred Weston's financial economics

12 text supports this position:

13

14   The market data utilized in the estimated current capital costs will include

15   a premium for anticipated inflation. But while the market remembers to

16   include an adjustment for inflation in the discount factor, the cash flow

17   estimates used by the firm in the capital budgeting analysis may fail to

18   include an element to reflect future inflation. Given that the cost of capital

19   (observed using market rates of return) already includes expected inflation,

20   the decision maker can correct for inflation either (a) by adding an

21   estimate of inflation to the cash flows in the numerator or (b) by

22   expressing the numerator without including an adjustment for inflation and

23   removing an inflationary factor from the market rate in the denominator.

24

25   ... Sound analysis requires that the anticipated inflation rate be taken into

1   account in the cash flow estimates.

2

3   ... Thus when anticipated inflation is properly reflected in both the cash

4   flow estimates in the numerator and the required rate of return from

5   market data in the denominator, the resulting NPV calculation will be in

6   both real and nominal terms. This was noted by Findlay and Frankle

7   [1976] as follows: "Any properly measured, market-determined wealth

8   concept is, simultaneously, *both nominal and real.* NPV, or any other

9   wealth measure gives the amount for which one can 'cash out' now

10   (nominal) and also the amount of today's goods that can be consumed at

11   today's prices (real)" (p.84). Thus if inflation is reflected in both the cash

12   flow estimates and in the required rate of return, the resulting NPV

13   estimate will be free of inflation bias. (Source: *Financial Theory and*

14   *Corporate Policy*, 3rd edition by Thomas E. Copeland and J. Fred Weston,

15   1988 Addison-Wesley Publishing Company, pages 62-63.)

16

17   According to the economic theory outlined above, accounting for inflation both in the cost

18   of capital and in the cash flow analysis is the correct methodology. Thus, BST's reflection

19   of inflation both in the investment calculation and as a consideration in establishing the

20   cost of capital is valid.

21

22   **Q.   Please summarize your assessment of Mr. Wood's cost of debt and capital structure**

23   **estimates for BST.**

24   A.   Mr. Wood incorrectly estimate BST's cost of debt as 7.2%. He misestimates BST's cost of

25   debt in part because he incorrectly includes debt issues in his analysis that were not issued

1   to fund telephone network assets. My updated testimony shows that under current capital

2   market conditions BST's forward-looking cost of debt is 7.79%.

3

4   Mr. Wood inappropriately places significant weight on book value capital structures in

5   determining his recommended cost of capital range, thus significantly underestimating the

6   overall cost of capital. Market value-based capital structures, such as those shown in

7   Billingsley Exhibit No. RSB-6, are appropriate for use in this UNE proceeding.

8

9   **IV.   UPDATED ESTIMATES OF BST'S EQUITY CAPITAL COSTS**

10   **A.   UPDATED DCF MODEL ESTIMATES**

11

12 **Q.   How have you updated your analysis since you filed direct testimony in this**

13   **proceeding on February 16, 2001?**

14 A.   I use more recent stock price, interest rate, growth rate, dividend, and beta coefficient data

15   in my analyses. This assures that my capital cost estimates for BST are as timely and

16   forward-looking as possible.

17

18 **Q.   What updated cost of equity capital do you estimate for BST using the DCF model**

19   **presented in your previously filed direct testimony?**

20 A.   Billingsley Exhibit No. RSB-1 lists the updated portfolio of 20 firms that are comparable in

21   risk to BST and reports the average cost of equity for the portfolio using both IBES and

22   Zacks growth rate forecasts. Billingsley Exhibit No. RSB-2 discusses the criteria used to

23   identify firms comparable in risk to BST. The evidence indicates that the cost of equity for

16

1   BST is between 14.86% and 15.60% using the DCF approach.

2

3   **B.   UPDATED CAPITAL ASSET PRICING MODEL ESTIMATE OF BST'S**

4   **COST OF EQUITY**

5

6   Q.   **What updated cost of equity capital do you estimate for BST under the CAPM**

7   **approach?**

8   A.   Using April, 2001 data, I estimate an updated risk-free rate of return of 5.95% (see

9   Billingsley Exhibit No. RSB-3), an average beta of 0.73 for firms comparable in risk to

10   BST (see Billingsley Exhibit No. RSB-1), and IBES and Zacks growth rate estimates that

11   imply an expected return on the S&P 500 of 17.53% and 16.87%, respectively. These

12   objective, market-determined data indicate that BST's cost of equity capital is 14.40%

13   using the IBES growth rate and 13.92% using the Zacks growth rate forecast.

14

15   **V.   UPDATED MARKET RISK PREMIUM ANALYSES OF THE COST OF**

16   **EQUITY CAPITAL AND COST OF EQUITY ESTIMATE CONCLUSIONS**

17

18   **A.   Aa-RATED PUBLIC UTILITY BOND RETURN REFERENCE POINT**

19   **ANALYSIS**

20

21   Q.   **What updated broad market risk premium cost of equity do you estimate for the S&P**

22   **500?**

23

24   A.   Billingsley Exhibit No. RSB-4 shows that the average expected risk premium on the

25   S&P500 relative to Aa-rated public utility bonds from 1987 to April of 2001 is 7.50%. The

17

1   average yield on Aa-rated public utility debt over the most recent three months (February to

2   April of 2001) is 7.62%. Thus, the average risk premium of 7.50% is added to the recent

3   average Aa-public utility bond return of 7.62% to yield an expected cost of equity return on

4   the S&P 500 of 15.12%.

5

6   In summary, risk premium analysis using the Aa-rated public utility bond return reference

7   point indicates that the expected return on the broad equity market, as measured by the S&P

8   500, is currently about 15.12%.

9

10   **B.   ADJUSTMENT FOR POTENTIAL CHANGES IN THE RISK**

11   **PREMIUM OVER TIME**

12

13   **Q.   What specific adjustment do you make to update your risk premium analysis in light**

14   **of the evidence cited in your previously filed direct testimony on the inverse**

15   **relationship between the risk premium and the level of interest rates?**

16   A.   As noted in my direct testimony, during the period of the Harris and Marston study (R. S.

17   Harris and F.C. Marston, "Estimating Shareholder Risk Premia Using Analysts' Growth

18   Forecasts," *Financial Management*, Vol. 21, No. 2, 1992, pp. 63-70), the average risk

19   premium was 6.47% and the average yield on long-term U.S. Treasury bonds was 9.84%.

20   The study finds evidence that the equity market risk premium is expected to change an

21   average of -.651 of changes in the level of long-term Treasury bond yields. Given that the

22   current average yield on 30-year Treasury bonds is 5.65% (April 2001), the appropriate

23   current risk premium is 9.20%. This is calculated by multiplying the 4.19% decline in rates

24   since the time period of Harris and Marston's study by -.651 and adding back the average

25   risk premium of 6.47% to the indicated change of 2.73%. This alternative approach

1   consequently provides an expected return on the S&P 500 of 14.85%, which is the current

2   average level of 30-year Treasury yields of 5.65% added to the adjusted risk premium of

3   9.20%.

4

5   The above risk premium analyses indicate that the current expected return on the overall

6   equity market is between 14.85% and 15.12%. This corroborates the reasonableness of the

7   above DCF- and CAPM-based cost of equity estimates for BST.

8

9   **C. OVERALL CONCLUSIONS CONCERNING BST'S UPDATED COST**

10   **OF EQUITY**

11

12 **Q. What is your conclusion with regard to BST's equity capital costs in light of the most**

13   **recent capital market data?**

14 A. Based on my updated cost of equity analyses, I believe that BST's cost of equity is in the

15   range of 13.92% to 15.60%.

16

17 **VI. BST'S UPDATED DEBT CAPITAL COST**

18

19 **Q. What is your updated estimate of the forward-looking cost of debt for BST?**

20 A. I use the yields on Aa-rated bonds as the benchmark in my analysis because this is the bond

21   rating on BST's debt. In April of 2001, 30-year U.S. Treasury bonds yielded an average of

22   5.65%. As shown in Billingsley Exhibit RSB-5, the spread between Aa-rated public utility

23   bonds and 30-year Treasury bonds averaged 2.14% from February to April of 2001. Adding

24   this average spread of 2.14% to the above April Treasury bond yield to maturity of 5.65%

25   produces a yield of 7.79%, which does not reflect the material effect of flotation costs.

19

1

2   Based on my updated analysis, I believe that BST's forward-looking cost of debt is 7.79%.

3

4   **VII. REASONABLENESS OF USING AN 11.25% COST OF CAPITAL**

5   **IN THE BST COST STUDIES**

6

7 **Q.** **What are the results of your updated test of the reasonableness of BST's use of an**

8   **11.25% overall cost of capital?**

9 **A.** Using the same approach as that in my direct testimony, I apply my updated estimates of

10   BST's cost of equity and cost of debt to the updated average market value-base capital

11   structure for the group of 20 firms shown to be comparable in risk to BST. As shown in

12   Billingsley Exhibit RSB-6, as of December 31, 2000, the average capital structure for the

13   firms comparable in risk to BST is 14.79% debt and 85.21% equity. Using an updated cost

14   of debt of 7.79% and a cost of equity from 13.92% to 15.60%, BST's implied overall cost

15   of capital is in the range of 13.01% to 14.44%. Thus, BST's use of an 11.25% overall cost

16   of capital in its UNE cost studies is quite conservative.

17

18 **Q.** **Does this conclude your rebuttal testimony?**

19 **A.** Yes, it does.

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Billingsley Exhibit No. RSB-1
DCF and CAPM Data for BST
    Comparable Firm Portfolio
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DCF AND CAPM DATA FOR BST COMPARABLE FIRM PORTFOLIO

DCF RESULTS

Portfolio of Comparable Firms	IBES	ZACKS	BARRA Beta Coefficients
Anheuser Busch Companies, Incorporated	12.07%	12.18%	0.72
Apache Corporation	19.37%	17.11%	0.85
Avery Dennison Corporation	15.44%	15.03%	0.79
Baxter International, Incorporated	14.98%	15.20%	0.65
Boeing Company	16.70%	17.24%	0.78
Burlington Resources Incorporated	27.89%	12.67%	0.76
Clorox Company	14.90%	14.27%	0.80
Coca Cola Company	14.73%	14.85%	0.64
Colgate Palmolive Company	13.96%	13.84%	0.79
R. R. Donnelley & Sons Company	15.49%	17.14%	0.72
Ecolab Incorporated	15.51%	15.51%	0.73
Kimberly-Clark Corporation	13.30%	13.71%	0.82
May Dept Stores Company	13.15%	12.55%	0.75
New York Times Company	13.15%	13.50%	0.79
Pall Corporation	18.19%	17.29%	0.76
Philip Morris Companies, Incorporated	17.42%	18.36%	0.60
Proctor & Gamble Company	13.74%	13.69%	0.75
Sonoco Products Company	13.21%	13.73%	0.69
Sysco Corporation	15.01%	15.88%	0.61
Texaco, Incorporated	13.87%	13.44%	0.57
AVERAGE	**15.60%**	**14.86%**	**0.73**

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Billingsley Exhibit No. RSB-2
Comparable Firm Identification
Criteria and Methodology
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COMPARABLE FIRM IDENTIFICATION CRITERIA AND METHODOLOGY

I. Introduction

Since BellSouth Telecommunications (BST) does not have equity trading independently of its parent holding company, BellSouth Corporation, there is no direct equity market evidence with which to directly measure the company's equity costs. Thus, it is necessary to identify a portfolio of firms that is comparable in equity investment risk to the target firm, which is BST. The discounted cash flow (DCF) model is applied to the portfolio's members and an average cost of equity capital is determined for the BST-comparables group. Given that this portfolio of firms is of comparable risk to BST, this average cost of equity is an objective, reasonable estimate of BST's cost of equity. The next section identifies the sources of investment risk and the specific proxies used to identify comparable firms.

II. Risk Criteria

The following sources of investment risk are measured and used to identify a group of firms that is comparable in risk to the BST target under analysis:

A. Financial Risk

1. Relative Amount of Debt

    Financial risk is dependent, in part, on the amount of total debt employed by a firm relative to its equity base. Other things being equal, higher debt per dollar of equity implies higher risk. This source of risk is measured by a firm's equity-to-total capital ratio. The most recent annual value (1999) of this ratio is used.

2. Ability to Service Debt

    Apart from the above descriptive measure of a firm's relative indebtedness, it is important to evaluate the ability of a firm to service its total debt. This is assessed by examining the amount of interest (I) that a firm owes relative to the resources (net cash flow (NCF), or net income plus non-cash expenses plus interest expense) it has available to meet that commitment. This is measured by the cash flow-based interest coverage ratio, NCF/I. Other things being equal, an increase in this ratio reflects greater ability to service debt and consequently implies lower riskiness. The most recent annual value (1999) of this variable is used.

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3. Bond Rating

Bond ratings reflect a rating agency's evaluation of the relative probability of default on a firm's given debt security. Ratings are readily accessible to investors and are commonly used to appraise the risk of a firm. Bond ratings are assigned numerical (i.e., dummy variable) values for the purposes of the present analysis.

B. Business Risk

1. Variability of Cash Flows

The variability of a firm's cash flows characterize the riskiness of a firm's chosen line of business. Cash flows represent a firm's command over goods and services. The risk implications of a given level of cash flows are easiest to interpret when related to an economically meaningful base such as total assets. This source of risk is measured by the standard deviation of the ratio of a firm's operating cash flows-to-total average assets. Higher values of the measure are associated with greater risk. The variable is calculated using the most recent five years of annual data (1995-1999).

2. Operating Return on Assets

The operating return on assets, as measured by the ratio of a firm's operating cash flow-to-total average assets, reflects the business risk associated with generating income in a given line of business. Operating cash flow is used because it does not include the risk effects captured in measures that include financing and investing choices. This variable is calculated using the most recent annual data (1999).

C. Relationship Among Regulatory, Business, and Financial Risk

As discussed in the my direct testimony filed in this proceeding, incumbent local exchange companies (ILECs) like BST face significant regulatory risk. While this risk is important, it is cannot be measured directly. However, it is reasonable to expect that the above business and financial risk measures capture the effects of regulatory risk. In other words, business and financial risk measurements should be influenced by the regulatory environment faced by a firm. Because the business and financial risk characteristics of BST reflect its regulatory environment, the resulting sample of companies comparable in risk to BST captures its business, financial, and regulatory risk. Indeed, the influence of regulatory risk on business and financial risk measures allows the comparable risk sample to be drawn from the broadest possible sample of firms irrespective of their particular regulatory environment. In other words,

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it is not necessary to limit the potential sample of companies that are comparable in risk to BST to regulated telecommunications firms because the influence of the regulatory environment is already captured in the business and financial risk measurements. Investors compare companies on the basis of expected return and risk across industry classifications and regulatory environments in making day-to-day investment decisions. Thus, the process used in the current analysis to identify a group of firms that are comparable in risk to BST relies on the common-sense logic used by investors in comparing firms.

III. Methodology Used in the Comparable Firms Identification Process

A portfolio of comparable firms is identified using a modified cluster analysis model. Classical cluster analysis techniques develop natural groupings of objects based on the relationships among a given set of descriptive variables. The goal is to determine how the object should be assigned to groups so that there will be as much similarity within groups and as much difference among groups as possible. No predetermined reference object is offered to organize the grouping effort. The modified cluster analysis used in this analysis differs from the classical techniques by identifying a target object (firm) characterized by several descriptive (financial) measures. The goal of this application is to find a group of firms that is as similar as possible to the target firm in terms of the identified measures of investment risk. Unlike classical cluster analysis, the goal of maximizing the differences among groups is irrelevant since all dissimilar groups are discarded. Specifically, in this context, only those firms that are identified as comparable to the given target firm are retained for use in inferring its cost of equity capital.

As in classical cluster models, similarity is determined by measuring the Euclidian distance between the descriptive variables in a manner that considers the multivariate nature of the problem. The distance D_i of each firm i in the sample from the target firm T, assuming the five descriptive variables V_{ij} discussed above, is calculated as:

$$D_i = \sqrt{\sum_{j=1}^{5} (V_{ij} - V_{Tj})^2}.$$

The distance measure uses the squared differences of a given firm's descriptive variable from that of the target firm T in order to measure distance irrespective of whether it is above (positive) or below (negative) the respective value for the target firm. The portfolio of firms considered to be similar to the target, BST, is identified by balancing the goals of minimizing the distance D_i of a firm from the target with the desire to have a sample of sufficient size to assure confidence in its representativeness.

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IV. Issues in Applying Cluster Analysis

Only firms available on the COMPUSTAT data source also having an IBES and Zacks consensus growth rate forecast based on at least two analysts' estimates are retained for analysis. Foreign, financial, and limited partnership firms are eliminated. The sample of firms used to identify the BST-comparable portfolio removes outliers on a variable-by-variable basis. Those firms with variable values greater than two standard deviations above or below the mean value of the population for each variable are deleted. All outliers are eliminated before standardizing the variables to prevent biasing the means and standard deviations. The final population consists of 310 firms.

Since the proxies of investment risk discussed above are denominated in different units of measurement, they consequently need to be standardized. A Z-statistic is calculated using the mean of V_j and the standard deviation σ_j of each variable across all of the firms as:

$$Z_{ij} = \frac{V_{ij} - \overline{V_j}}{\sigma_j}$$

The squared difference between the Z-value for each firm's given variable and the value of the Z-statistic for the target firm for the same given variable across all descriptive variables is then calculated. After generating Z-values for every variable for each firm, squared differences for each firm are summed. The distance measure D_i is determined by taking the square root of the sum of the squared differences.

The final step in the analysis is the identification of the portfolio of the 20 firms that are the least distance from the BST target. Billingsley Exhibit No. RSB-1 lists the final group of comparable firms for BST. A correlation coefficient matrix for the variables used to identify firms is provided on the following page.

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CLUSTER ANALYSIS CORRELATION MATRIX

	Common Equity to Total Capital	Operating Cash Flow to Assets (Standard Deviation)	Operating Cash Flow to Assets	Cash Flow Interest Coverage
Bond Rating	-0.2702	0.1416	-0.2506	-0.3621
Common Equity to Total Capital		0.1297	0.3770	0.6021
Operating Cash Flow to Assets (Standard Deviation)			0.0624	0.0317
Operating Cash Flow to Assets				0.5955

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Billingsley Exhibit No. RSB-3
Treasury Bond Futures
Interest Rate
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CALCULATION OF U. S. TREASURY BOND FUTURES' IMPLIED INTEREST RATE

The interest rate implied by the price of a U.S. Treasury Bond futures contract cannot be directly taken from **The Wall Street Journal**. Rather, it must be calculated as follows:

$$(\textit{Price of Contract}) \text{ X } 1{,}000 = \frac{\$3{,}000}{(1 + i)^1} + \frac{\$3{,}000}{(1 + i)^2} + ... + \frac{\$3{,}000}{(1 + i)^{40}} + \frac{\$100{,}000}{(1 + i)^{40}} ,$$

where i = the semi-annual rate of return.

The implied annual rate of return on U.S. Treasury bond futures is calculated as:
Annual Rate of Return $= (1 + i)^2 - 1.$

The U.S. Treasury Bond futures contract prices shown below are averaged, by contract maturity, using the Friday settlement prices for all contracts trading for the entire month of April, 2001. However, given that the market was closed on Friday, April 13th, data for Thursday, April 12th are used in the analysis below.

U.S. TREASURY BOND FUTURES CONTRACT DATA

Contract Maturity	04/06/01	04/12/01	04/20/01	04/27/01	Average Price	Implied Yield
06/01	104.6563	102.3125	100.5000	100.2500	101.9297	5.92%
09/01	104.1563	101.8438	99.9063	99.6875	101.3985	5.97%

AVERAGE IMPLIED YIELD   **5.95%**

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Billingsley Exhibit No. RSB-4
Expected Market Risk
    Premium Approach: Aa Rating Base
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EXPECTED MARKET RISK PREMIUM: Aa RATING BASE

Month	Standard & Poor's 500 DCF Cost of Equity (%)	Moody's Aa Public Utility Bonds (%)	Market Risk Premium (%)
Oct-87	14.82	10.53	4.29
Nov-87	15.06	10.41	4.65
Dec-87	15.46	10.35	5.11
Jan-88	15.65	9.74	5.91
Feb-88	15.52	9.52	6.00
Mar-88	15.42	9.67	5.75
Apr-88	15.45	10.15	5.30
May-88	15.42	10.44	4.98
Jun-88	15.65	10.26	5.39
Jul-88	15.63	10.48	5.15
Aug-88	15.72	10.58	5.14
Sep-88	15.66	10.14	5.52
Oct-88	15.63	9.79	5.84
Nov-88	15.64	9.80	5.84
Dec-88	15.58	9.90	5.68
Jan-89	15.54	9.89	5.65
Feb-89	15.34	9.93	5.41
Mar-89	15.34	10.05	5.29
Apr-89	15.35	10.02	5.33
May-89	15.40	9.79	5.61
Jun-89	15.22	9.37	5.85
Jul-89	15.36	9.23	6.13
Aug-89	15.14	9.27	5.87
Sep-89	14.94	9.35	5.59
Oct-89	15.02	9.28	5.74
Nov-89	15.17	9.25	5.92
Dec-89	15.12	9.26	5.86
Jan-90	15.18	9.39	5.79
Feb-90	15.29	9.57	5.72
Mar-90	15.47	9.60	5.87
Apr-90	15.62	9.81	5.81
May-90	15.70	9.83	5.87
Jun-90	15.71	9.60	6.11
Jul-90	15.81	9.61	6.20
Aug-90	15.69	9.78	5.91
Sep-90	15.91	9.87	6.04

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Month	Standard & Poor's 500 DCF Cost of Equity (%)	Moody's Aa Public Utility Bonds (%)	Market Risk Premium (%)
Oct-90	16.04	9.77	6.27
Nov-90	16.23	9.59	6.64
Dec-90	16.16	9.42	6.74
Jan-91	16.17	9.39	6.78
Feb-91	16.01	9.16	6.85
Mar-91	15.85	9.23	6.62
Apr-91	15.61	9.14	6.47
May-91	15.55	9.16	6.39
Jun-91	15.59	9.28	6.31
Jul-91	15.59	9.26	6.33
Aug-91	15.62	9.06	6.56
Sep-91	15.59	8.94	6.65
Oct-91	15.52	8.92	6.60
Nov-91	15.58	8.87	6.71
Dec-91	15.65	8.71	6.94
Jan-92	15.60	8.63	6.97
Feb-92	15.71	8.76	6.95
Mar-92	15.57	8.82	6.75
Apr-92	15.53	8.76	6.77
May-92	15.54	8.69	6.85
Jun-92	15.45	8.63	6.82
Jul-92	15.44	8.45	6.99
Aug-92	15.46	8.30	7.16
Sep-92	15.57	8.28	7.29
Oct-92	15.53	8.42	7.11
Nov-92	15.56	8.51	7.05
Dec-92	15.57	8.32	7.25
Jan-93	15.29	8.14	7.15
Feb-93	15.07	7.92	7.15
Mar-93	15.00	7.76	7.24
Apr-93	14.71	7.64	7.07
May-93	14.81	7.64	7.17
Jun-93	14.73	7.54	7.19
Jul-93	14.61	7.38	7.23
Aug-93	14.59	7.07	7.52
Sep-93	14.43	6.89	7.54
Oct-93	14.50	6.89	7.61

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Month	Standard & Poor's 500 DCF Cost of Equity (%)	Moody's Aa Public Utility Bonds (%)	Market Risk Premium (%)
Nov-93	14.52	7.17	7.35
Dec-93	14.50	7.18	7.32
Jan-94	14.55	7.18	7.37
Feb-94	14.59	7.34	7.25
Mar-94	14.66	7.74	6.92
Apr-94	14.69	8.12	6.57
May-94	14.77	8.24	6.53
Jun-94	14.89	8.21	6.68
Jul-94	14.95	8.38	6.57
Aug-94	14.78	8.32	6.46
Sep-94	14.82	8.56	6.26
Oct-94	14.80	8.78	6.02
Nov-94	14.95	8.90	6.05
Dec-94	14.96	8.69	6.27
Jan-95	15.01	8.66	6.35
Feb-95	14.95	8.45	6.50
Mar-95	14.95	8.29	6.66
Apr-95	14.89	8.17	6.72
May-95	14.93	7.80	7.13
Jun-95	14.89	7.49	7.40
Jul-95	14.92	7.60	7.32
Aug-95	14.95	7.71	7.24
Sep-95	14.95	7.48	7.47
Oct-95	14.89	7.30	7.59
Nov-95	14.90	7.22	7.68
Dec-95	14.82	7.03	7.79
Jan-96	14.68	7.02	7.66
Feb-96	14.79	7.20	7.59
Mar-96	14.79	7.55	7.24
Apr-96	14.80	7.70	7.10
May-96	15.01	7.79	7.22
Jun-96	14.99	7.87	7.12
Jul-96	14.97	7.83	7.14
Aug-96	15.10	7.66	7.44
Sep-96	15.22	7.84	7.38
Oct-96	15.21	7.60	7.61
Nov-96	15.24	7.32	7.92
Dec-96	15.31	7.44	7.87

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Month	Standard & Poor's 500 DCF Cost of Equity (%)	Moody's Aa Public Utility Bonds (%)	Market Risk Premium (%)
Jan-97	15.22	7.68	7.54
Feb-97	15.16	7.60	7.56
Mar-97	15.11	7.84	7.27
Apr-97	15.36	8.00	7.36
May-97	15.49	7.85	7.64
Jun-97	15.56	7.68	7.88
Jul-97	15.62	7.43	8.19
Aug-97	15.62	7.46	8.16
Sep-97	15.66	7.54	8.12
Oct-97	15.61	7.28	8.33
Nov-97	15.57	7.15	8.42
Dec-97	15.48	7.07	8.41
Jan-98	15.54	6.94	8.60
Feb-98	15.63	6.99	8.64
Mar-98	15.56	7.03	8.53
Apr-98	15.57	7.02	8.55
May-98	15.69	7.02	8.67
Jun-98	15.77	6.91	8.86
Jul-98	15.80	6.91	8.89
Aug-98	16.14	6.87	9.27
Sep-98	16.16	6.78	9.38
Oct-98	16.10	6.80	9.30
Nov-98	16.39	6.89	9.50
Dec-98	16.60	6.78	9.82
Jan-99	16.99	6.82	10.17
Feb-99	17.06	6.94	10.12
Mar-99	17.11	7.11	10.00
Apr-99	17.19	7.11	10.08
May-99	17.10	7.38	9.72
Jun-99	16.95	7.67	9.28
Jul-99	17.18	7.62	9.56
Aug-99	17.24	7.82	9.42
Sep-99	17.45	7.82	9.63
Oct-99	17.74	7.96	9.78
Nov-99	18.06	7.82	10.24
Dec-99	18.65	8.00	10.65
Jan-00	18.70	8.17	10.53
Feb-00	19.02	7.99	11.03

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Month	Standard & Poor's 500 DCF Cost of Equity (%)	Moody's Aa Public Utility Bonds (%)	Market Risk Premium (%)
Mar-00	19.29	7.99	11.30
Apr-00	19.09	8.00	11.09
May-00	18.96	8.44	10.52
June-00	19.01	8.10	10.91
Jul-00	19.64	8.10	11.54
Aug-00	19.72	7.95	11.77
Sep-00	19.57	8.11	11.46
Oct-00	19.17	8.08	11.09
Nov-00	19.01	8.03	10.98
Dec-00	18.75	7.79	10.96
Jan-01	18.81	7.73	11.08
Feb-01	17.73	7.62	10.11
Mar-01	17.37	7.52	9.86
Apr-01	17.53	7.72	9.81
AVERAGE	**15.82**	**8.32**	**7.50**[*]

[*] Calculated as the average of the monthly risk premiums, not as the differences of the averages for the entire time.

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Billingsley Exhibit No. RSB-5
Recent Aa vs. Treasury Bond
Yields
Page 1 of 1

RECENT Aa VS. TREASURY BOND YIELDS

Month	Moody's Aa Public Utility Bond (%)	30-Year U.S. Treasury Bond (%)	Aa/U.S. Treasury Bond Spread (%)
Feb-01	7.62	5.45	2.17
Mar-01	7.51	5.34	2.17
Apr-01	7.72	5.65	2.07
AVERAGE	**7.62**	**5.48**	**2.14***

Sources: *Moody's Bond Record.*
   Board of Governors of the Federal Reserve, H15 statistical release.

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* Calculated as the average of the monthly spreads, not as the differences of the averages for the entire time.

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Billingsley Exhibit No. RSB-6
Market Value Capital Structure of
BST Comparables
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Market Value Capital Structure of Portfolio of Companies Comparable in Risk to BellSouth Telecommunications
December 2000[1]

COMPANY	MARKET VALUE OF COMMON EQUITY ($M)	BOOK VALUE OF TOTAL DEBT ($M)	BOOK VALUE OF PREFERRED EQUITY ($M)	DEBT / TOTAL CAPITAL[2]	EQUITY / TOTAL CAPITAL
Anheuser Busch Companies, Incorporated	41,113.80	5,304.70	0.00	0.1143	0.8857
Apache Corporation	8,662.24	2,218.26	306.59	0.2257	0.7743
Avery Dennison Corporation	5,349.60	827.20	0.00	0.1339	0.8661
Baxter International, Incorporated	25,891.61	2,360.00	0.00	0.0835	0.9165
Boeing Company	55,197.71	8,799.00	0.00	0.1375	0.8625
Burlington Resources Incorporated	10,886.23	2,301.00	0.00	0.1745	0.8255
Clorox Company	8,355.32	1,363.00	0.00	0.1403	0.8597
Coca Cola Company	151,416.43	5,651.00	0.00	0.0360	0.9640
Colgate Palmolive Company	36,577.64	2,978.20	9.70	0.0755	0.9245
R. R. Donnelley & Sons Company	3,268.49	1,010.83	0.00	0.2362	0.7638
Ecolab Incorporated	5,491.83	370.97	0.00	0.0633	0.9367
Kimberly-Clark Corporation	37,703.50	3,491.10	0.00	0.0847	0.9153
May Dept Stores Company	9,752.16	4,619.00	50.00	0.3238	0.6762
New York Times Company	6,505.15	930.72	0.00	0.1252	0.8748
Pall Corporation	2,624.01	416.46	0.00	0.1370	0.8630
Philip Morris Companies, Incorporated	97,191.42	29,122.00	0.00	0.2306	0.7694
Proctor & Gamble Company	102,429.60	12,126.00	319.00	0.1083	0.8917
Sonoco Products Company	2,054.50	857.64	0.00	0.2945	0.7055
Sysco Corporation	19,889.04	1,074.71	0.00	0.0513	0.9487

[1] Based on the closing common stock prices and financial statements as of December 31, 2000.
[2] Debt is defined as the book value of total debt plus the book value of preferred equity.

BellSouth Telecommunications
Docket No. 2001-65-C
Billingsley Exhibit No. RSB-6
Market Value Capital Structure of
BST Comparables
Page 2 of 2

COMPANY	MARKET VALUE OF COMMON EQUITY ($M)	BOOK VALUE OF TOTAL DEBT ($M)	BOOK VALUE OF PREFERRED EQUITY ($M)	DEBT / TOTAL CAPITAL[2]	EQUITY / TOTAL CAPITAL
Texaco, Incorporated	33,607.33	7,191.00	300.00	0.1823	0.8177
Average[3]	33,198.38	4,650.64	49.26	0.1479	0.8521

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[3] The average debt and equity ratios are calculated as the average of the respective ratios for each individual company.

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STATE OF SOUTH CAROLINA      )
                             ) CERTIFICATE OF SERVICE
COUNTY OF RICHLAND           )
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The undersigned, Susan Davis Gibson, hereby certifies that she is employed by the Legal Department for BellSouth Telecommunications, Inc. ("BellSouth") and that she has caused the Rebuttal Testimony of Dr. Randall S. Billingsley, CFA to be served by placing such in the care and custody of the United States Postal Service, with first-class postage affixed thereto and addressed to the following this June 11, 2001:

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